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Bulletin #24

Euler's identity: proof of digital simulation?

$$e^{i\pi} + 1 = 0$$

where

e is [Euler's number](#), the base of [natural logarithms](#),
 i is the [imaginary unit](#), which by definition satisfies $i^2 = -1$, and
 π is [pi](#), the [ratio](#) of the [circumference](#) of a [circle](#) to its [diameter](#).

Euler's identity¹ is named after the Swiss [mathematician Leonhard Euler](#). It is a special case of [Euler's formula](#) when evaluated for $x = \pi$. Euler's identity is considered to be an exemplar of [mathematical beauty](#) as it shows a profound connection between the most fundamental numbers in mathematics. In addition, it is directly used in [a proof\[3\]\[4\]](#) that π is [transcendental](#), which implies the impossibility of [squaring the circle](#).

This formula can be expressed in the following unconventional terms:

*Rate of growth to the power of imaginary geometry plus
the Ultra-ONE equals ZERO*

Since the exponent is the imaginary unit times pi (which is geometry), the exponent reflects imaginary geometry.

The 1 and 0 are ofcourse elementary identities used in Boolean gate logic AND, OR and XOR gates.

¹ https://en.wikipedia.org/wiki/Euler%27s_identity